

Thomas Lewiner

List of Publications by Year in descending order

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64
papers

1,282
citations

516710

16
h-index

395702

33
g-index

65
all docs

65
docs citations

65
times ranked

1222
citing authors

#	ARTICLE	IF	CITATIONS
1	Efficient Implementation of Marching Cubes' Cases with Topological Guarantees. Journal of Graphics Tools, 2003, 8, 1-15.	0.5	336
2	On the Fly Curve Skeleton Computation for 3D Shapes. Computer Graphics Forum, 2007, 26, 323-328.	3.0	80
3	Curvature and torsion estimators based on parametric curve fitting. Computers and Graphics, 2005, 29, 641-655.	2.5	74
4	Competing Fronts for Coarse-to-Fine Surface Reconstruction. Computer Graphics Forum, 2006, 25, 389-398.	3.0	57
5	Optimal discrete Morse functions for 2-manifolds. Computational Geometry: Theory and Applications, 2003, 26, 221-233.	0.5	52
6	Applications of Forman's discrete Morse theory to topology visualization and mesh compression. IEEE Transactions on Visualization and Computer Graphics, 2004, 10, 499-508.	4.4	51
7	Space-time surface reconstruction using incompressible flow. ACM Transactions on Graphics, 2008, 27, 1-10.	7.2	50
8	Particle-based viscoplastic fluid/solid simulation. CAD Computer Aided Design, 2009, 41, 306-314.	2.7	47
9	Real-Time Gesture Recognition from Depth Data through Key Poses Learning and Decision Forests. , 2012, , .		47
10	Online gesture recognition from pose kernel learning and decision forests. Pattern Recognition Letters, 2014, 39, 65-73.	4.2	44
11	Interactive topology-aware surface reconstruction. ACM Transactions on Graphics, 2007, 26, 43.	7.2	41
12	Meshless Helmholtz-Hodge Decomposition. IEEE Transactions on Visualization and Computer Graphics, 2010, 16, 338-349.	4.4	37
13	Learning good views through intelligent galleries. Computer Graphics Forum, 2009, 28, 717-726.	3.0	36
14	Toward Optimality in Discrete Morse Theory. Experimental Mathematics, 2003, 12, 271-285.	0.7	27
15	Particle-based non-Newtonian fluid animation for melting objects. , 2006, , .		24
16	Robust adaptive meshes for implicit surfaces. Computer Graphics and Image Processing (SIBGRAPI), Proceedings of the Brazilian Symposium on, 2006, , .	0.0	24
17	Interactive 3D caricature from harmonic exaggeration. Computers and Graphics, 2011, 35, 586-595.	2.5	19
18	Interactive topology-aware surface reconstruction. , 2007, , .		17

#	ARTICLE	IF	CITATIONS
19	Statistical optimization of octree searches. Computer Graphics Forum, 2008, 27, 1557-1566.	3.0	16
20	Fast Generation of Pointerless Octree Duals. Computer Graphics Forum, 2010, 29, 1661-1669.	3.0	16
21	CHF: A Scalable Topological Data Structure for Tetrahedral Meshes. , 2005, , .		14
22	Stellar Mesh Simplification Using Probabilistic Optimization. Computer Graphics Forum, 2004, 23, 825-838.	3.0	12
23	Exploratory visualization based on multidimensional transfer functions and star coordinates. , 2006, , .		11
24	Schnyder Woods for Higher Genus Triangulated Surfaces, with Applications to Encoding. Discrete and Computational Geometry, 2009, 42, 489-516.	0.6	11
25	Arc-length based curvature estimator. , 0, , .		10
26	Vector field reconstruction from sparse samples with applications. Computer Graphics and Image Processing (SIBGRAPI), Proceedings of the Brazilian Symposium on, 2006, , .	0.0	10
27	Discrete affine minimal surfaces with indefinite metric. Differential Geometry and Its Applications, 2010, 28, 158-169.	0.5	10
28	Topological mesh operators. Computer Aided Geometric Design, 2010, 27, 1-22.	1.2	9
29	Affine-invariant curvature estimators for implicit surfaces. Computer Aided Geometric Design, 2012, 29, 162-173.	1.2	9
30	Critical sets in discrete Morse theories: Relating Forman and piecewise-linear approaches. Computer Aided Geometric Design, 2013, 30, 609-621.	1.2	8
31	Arch generated shear bands in granular systems. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 2099-2108.	2.6	7
32	GEncode: Geometry-driven compression for General Meshes. Computer Graphics Forum, 2006, 25, 685-695.	3.0	6
33	Combining Points and Tangents into Parabolic Polygons. Journal of Mathematical Imaging and Vision, 2007, 29, 131-140.	1.3	6
34	Parameterized complexity of discrete morse theory. , 2013, , .		5
35	Online human moves recognition through discriminative key poses and speed-aware action graphs. Machine Vision and Applications, 2017, 28, 185-200.	2.7	5
36	GEncode: Geometry-Driven Compression in Arbitrary Dimension and Co-Dimension. , 2005, , .		4

#	ARTICLE	IF	CITATIONS
37	Point set compression through BSP quantization. Computer Graphics and Image Processing (SIBGRAPI), Proceedings of the Brazilian Symposium on, 2006, , .	0.0	4
38	Estimating affine-invariant structures on triangle meshes. Computers and Graphics, 2016, 60, 83-92.	2.5	4
39	Parameterized Complexity of Discrete Morse Theory. ACM Transactions on Mathematical Software, 2016, 42, 1-24.	2.9	4
40	Hierarchical isocontours extraction and compression. , 0, , .		3
41	Parabolic Polygons and Discrete Affine Geometry. Computer Graphics and Image Processing (SIBGRAPI), Proceedings of the Brazilian Symposium on, 2006, , .	0.0	3
42	Projective Estimators for Point/Tangent Representations of Planar Curves. , 2008, , .		3
43	Approximations by Smooth Transitions in Binary Space Partitions. , 2008, , .		3
44	Topology Aware Vector Field Denoising. , 2010, , .		3
45	Tuning Manifold Harmonics Filters. , 2010, , .		3
46	Simplified Training for Gesture Recognition. , 2014, , .		3
47	Curvature Motion for Union of Balls. , 2005, , .		2
48	Extraction and compression of hierarchical isocontours from image data. Computerized Medical Imaging and Graphics, 2006, 30, 231-242.	5.8	2
49	Random Walks for Vector Field Denoising. , 2009, , .		2
50	Scale-Space for Union of 3D Balls. , 2009, , .		2
51	Support Vectors Learning for Vector Field Reconstruction. , 2009, , .		2
52	Stereo music visualization through manifold harmonics. Visual Computer, 2011, 27, 905-916.	3.5	2
53	ON 2D SOLID \hat{I}_{\pm} -COMPLEXES OF POISSON DISC SAMPLINGS. International Journal of Shape Modeling, 2009, 15, 77-91.	0.2	1
54	Geometry Super-Resolution by Example. , 2009, , .		1

#	ARTICLE	IF	CITATIONS
55	Streamline-Based Topological Graph Construction with Application to Self-Animated Images. , 2013, , .		1
56	Discrete line fields on surfaces. Topology and Its Applications, 2021, 290, 107603.	0.4	1
57	Cauchy problems for discrete affine minimal surfaces. Archivum Mathematicum, 2012, , 1-14.	0.3	1
58	Schnyder woods for higher genus triangulated surfaces (abstract). Electronic Notes in Discrete Mathematics, 2008, 31, 109-114.	0.4	0
59	Schnyder woods for higher genus triangulated surfaces. , 2008, , .		0
60	Role of arches in the generation of shear bands in a dense 3D granular system under shear. Journal of Physics: Conference Series, 2010, 246, 012016.	0.4	0
61	Projective Splines and Estimators for Planar Curves. Journal of Mathematical Imaging and Vision, 2010, 36, 81-89.	1.3	0
62	Guest Editorial: Image and Video Processing and Analysis. Journal of Mathematical Imaging and Vision, 2013, 45, 199-199.	1.3	0
63	Reconstruo Topolgica Tridimensional de Objetos Geolgicos em Bacias Martimas Usando Dados Ssmicos 2D ou 3D: uma Ferramenta Exploratria e Explotatria de Hidrocarbonetos. , 2007, , .		0
64	Minerao Visual de Multiatributos Ssmicos para Classificao de Multifcies. , 2007, , .		0